What is claimed is:

1. A substantially purified human mitochondrial membrane protein comprising the amino acid sequence of SEQ ID NO:1 or fragments thereof.

2. An isolated and purified polynucleotide sequence encoding the human mitochondrial membrane protein of claim 1.

3. A polynucleotide sequence which hybridizes under stringent conditions to the polynucleotide sequence of claim 2.

4. A hybridization probe comprising the polynucleotide sequence of claim 2.

5. An isolated and purified polynucleotide sequence comprising SEQ ID NO:2 or variants thereof.

6. A polynucleotide sequence which is complementary to the polynucleotide sequence of claim 2 or variants thereof.

7. A hybridization probe comprising the polynucleotide sequence of claim 6.

8. An expression vector containing the polynucleotide sequence of claim 2.

9. A host cell containing the vector of claim 8.

10. A method for producing a polypeptide comprising the amino acid sequence of SEQ ID NO:1 the method comprising the steps of:

a) culturing the host cell of claim 9 under conditions suitable for the expression of the polypeptide; and

b) recovering the polypeptide from the host cell culture.

11. A purified antibody which binds specifically to the polypeptide of claim 1.

12. A purified antagonist which specifically binds to and modulates the activity of the polypeptide of claim 1.

13. A method for treating cancer comprising administering to a subject in need of such treatment an effective amount of the antagonist of claim 12.

14. A method for detecting a polynucleotide encoding human mitochondrial membrane protein in a biological sample comprising the steps of:

a) hybridizing the polynucleotide of claim 6 to nucleic acid material of a biological sample, thereby forming a hybridization complex; and

b) detecting said hybridization complex, wherein the presence of said complex correlates with the presence of a polynucleotide encoding human mitochondrial membrane protein in said biological sample.

15. A method for identifying a specific antifungal agent, the method comprising:

a) combining at least one agent with a fungal TIM17,

b) identifying an agent which binds to the fungal TIM17,

c) combining the agent with the human mitochondrial membrane protein of claim 1, and

d) determining that the agent does not bind to the human mitochondrial membrane protein, thereby identifying the agent with antifungal specificity.

16. A method for identifying a specific antiprotozoal agent, the method comprising:

a) combining at least one agent with a protozoal TIM17,

b) identifying an agent which binds to the protozoal TIM17,

c) combining said agent with the human mitochondrial membrane protein of claim 1, and

d) determining that said agent does not bind to the human mitochondrial membrane protein, thereby identifying the agent with antiprotozoal specificity.

add B1